## **ABSTRACT**

A classifier 2 connected to a parallel network 1 constituted by a plurality of physically or logically independent networks N1 to Nm classifies a packet input 5 from an external network U1 to one of the networks N1 to Nm in the parallel network. A multiplexer 3 similarly connected to the parallel network 1 multiplexes the packet transferred by each of the networks N1 to Nm in the parallel network 1 and outputs the multiplexed packet to 10 the external network U2. It is thereby possible to execute transfer of the packet related to a specific service between the external networks U1 and U2 without an influence of traffic related to the other services.